

# AUTHOR INDEX

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Note that the leading numerals '91' are omitted from the access numbers; also note that, strictly speaking, this is an index of names, not authors—if an author's name has appeared two ways in the literature, it may appear two ways here. Finally note, if doing multi-year searches, that through Volume 36 annual cumulative indexes were published. In Volume 37 there are four quarterly non-cumulative indexes to search; from Volume 38 forward, two semiannual non-cumulative indexes are provided.

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## Subject Index (Notes)

I-17

**General principles.** A small number of very specific access terms (with accompanying non-searchable modifiers) is assigned to each document. The terms, drawn from the title or text, are rotated to generate the index entries.

A major emphasis is on proper geographic or physiographic names (e.g., Antarctic Bottom Water, Nares Abyssal Plain, Tyrrhenian Sea). Nearshore studies peculiar to one region might only be accessible under a country or continent name, although the name would then carry modifiers for more complete geographic and topical information. Additional spatial, zonal or environmental locators are frequently assigned to a document. Examples might include the terms mixed layer, troposphere, estuaries, fracture zones, and terms beginning with bottom-, surface-, or littoral-.

Another emphasis, when practicable, is on access terms that represent concrete, tangible or directly perceivable entities. Thus, phytoplankton might be assigned in preference to primary production, or seawater in preference to transparency, or sediments in preference to grain size. The less concrete words are freely used as modifiers, and they will frequently occur in the index as gathering points, or nodes, for cross-references to more specific terms, but generally will not collect many documents themselves, unless they are central to the paper's topic. In general, all processes (e.g., diagenesis), measured or calculated quantities (e.g., production), concepts (e.g., Evolution) and other abstractions are used as access terms only when they are the subject of a universal discussion rather than subsidiary to regional or other more concrete considerations.

A few non-English terms (Massif Central, gelbstoff) will occur in the index if thought to be appropriate.

**Hierarchies.** Only limited hierarchies have been constructed. Thus, a document on the Tyrrhenian Sea is not necessarily accessible under the Mediterranean Sea, nor a document concerned with the Tertiary period accessible under Cenozoic. But oceanic features (including bottom features) are built up to at least the name of a specific sea or gulf. Shallow water areas are built up through a terrestrial hierarchy to the name of a country (for the U.S. and Canada to the name of a state or province), or occasionally to the name of a major nearshore water body such as Mid-Atlantic Bight or Chesapeake Bay. Islands are built up to the name of an island group or the name of the

surrounding water body in the case of isolated islands. Geological periods and markers are built up to at least the name of an epoch, but events as old as the Precambrian are always accessible under that term. Specific cases are sometimes made accessible as general cases; for example, a document on the Kuroshio would also be generically accessible under the term currents provided that, for the paper in question, the Kuroshio was used to exemplify a more universal aspect of currents. Certain hierarchies, particularly taxonomic, may occur coincidentally because they are part of an original title; otherwise an attempt is made to build up the taxon in a title by one or two levels.

**Cross-references.** There is a cross-reference structure for many of the general terms. Cross-references that follow the phrase "see also" tend to be narrower terms, synonyms or near-synonyms. Cross-references that follow the phrase "more at" tend to be broader or more distantly related terms. A cross-reference which appears in capital letters contains either another list of cross-references under it, or, a list of documents that might well be highly relevant to the search. This can be so because two-word terms are frequently filed in both normal (specific) and inverted (general) forms. For example, plate tectonics is filed as plate tectonics, to juxtapose it with other plate- terms, and also as tectonics: plate, to juxtapose it with other tectonics-terms. It is the term tectonics which will have the cross-references to, e.g., neotectonics, seafloor spreading and subduction. Because the cross-references are made somewhat independently of the documents in the collection, a user could occasionally look up a cross-reference to find that the only entry is a reference back to the starting place.

**Search strategy.** Given the above, the following general rules apply to search strategy: (1) Select concrete or tangible terms insofar as practicable. (2) Build an appropriate set of broader and narrower terms, particularly for proper geographic or physiographic names, geological time periods, taxa and their common name equivalents; for the general terms, a systematic foray through the cross-references at this point is likely to be more useful than is their happenstance utilization after a search has begun. (3) Select both terrestrial and oceanic geographic names for nearshore areas. Finally, the searcher interested in a large set of documents that, regardless of individually specific or general natures, applies to a broad concept like tides or sediments might better search the appropriate headings of the bibliography itself. Suggestions regarding the index will always be appreciated.



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1991, Vol. 38(1-6), pp. 1-518  
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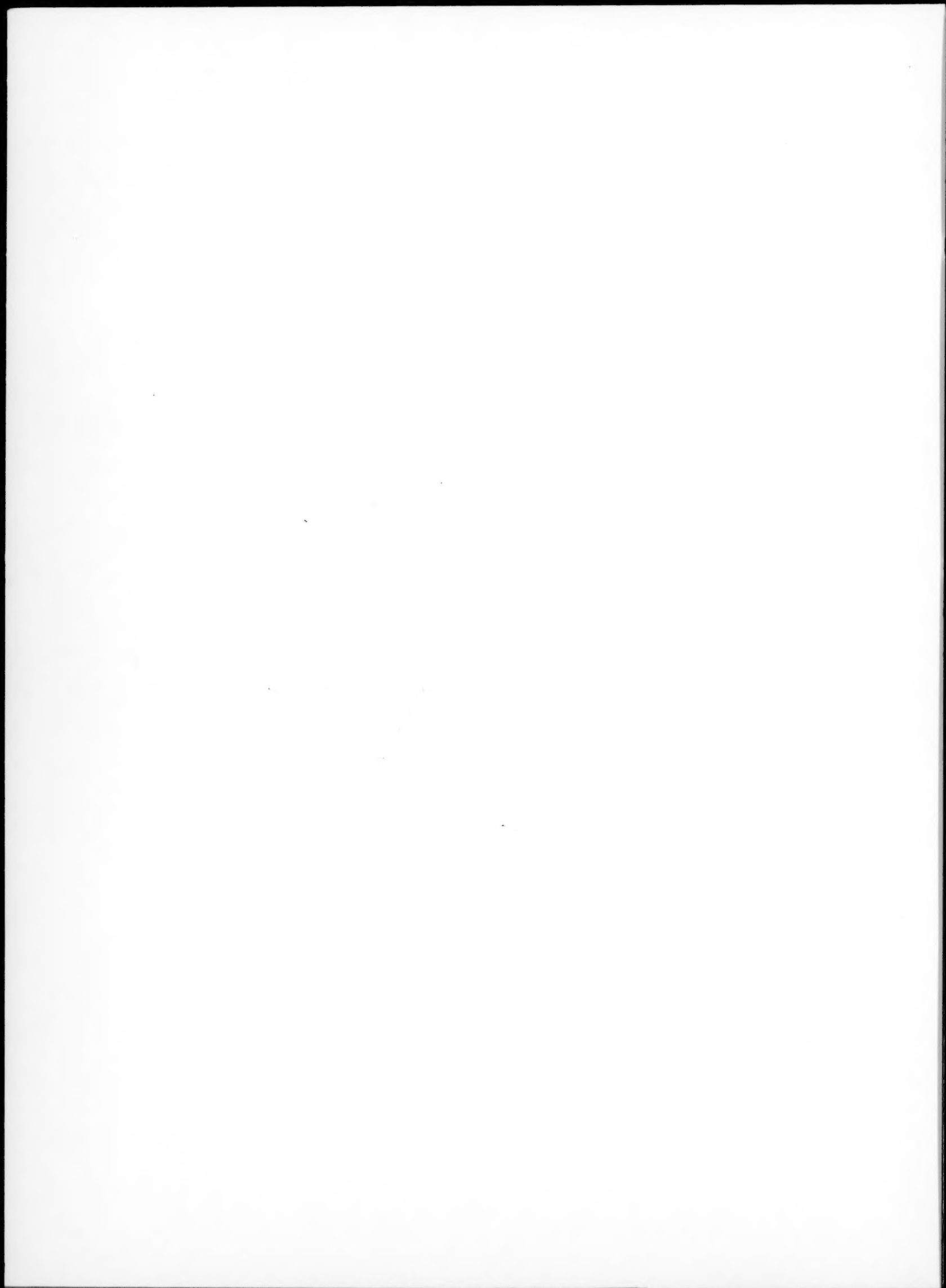
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 Boll. Mus. civ. Stor. nat. Venezia  
 Boll. Mus. civ. Stor. nat. Verona  
 Boll. Mus. Ist. biol. Univ. Genova  
 Boll. Oceanol. teor. appl.  
 Boll. Pesca Piscic. Idrobiol.  
 Boll. Soc. ital. Biol. sper.  
 Boll. Soc. Nat. Napoli  
 Boll. Soc. paleont. ital.  
 Boll. Zool.  
 Bolm Bot.  
 Bolm Fisiol. Anim., Univ. S Paulo  
 Bolm Inst. nac. Invest. Pescas, Lisb.  
 Bolm Inst. oceanogr., S Paulo  
 Bolm Inst. Pesca, S Paulo  
 Bolm Lab. Hidrobiol., São Luís-Maranhão, Brasil  
 Bolm Mus. munic. Funchal  
 Bolm parana. Geosci.  
 Bolm Zool., Univ. S Paulo  
 Boln Cent. Investnes Biol. Univ. Zulia  
 Boln cient., CIOH  
 Boln cient. Inst. Fomento Pesq., Santiago  
 Boln cient. tec., Guayaquil  
 Boln. Ecotropica  
 Boln Inst. Biol. mar. Univ. nac. B. Aires  
 Boln Inst. esp. Oceanogr.  
 Boln Inst. Mar Perú  
 Boln Inst. Oceanogr. Univ. Oriente  
 Boln Mus. Mar, Colomb.  
 Boln R. Soc. esp. Hist. nat.
- Boln Serv. Hidrogr. Nav., Argent.  
 Boln Soc. Biol. Concepción  
 Boln Soc. geol. Perú  
 Bonn. zool. Beitr.  
 Boreas  
 Boston Coll. environ. Affairs Law Rev.  
 Bot. Gaz.  
 Bot. J. Linn. Soc.  
 Bot. Mag., Tokyo  
 Bot. Rev.  
 Botanica mar.  
 Botanicheskii Zh. SSSR  
 Botanisk Tidsskr.  
 Boundary-layer Met.  
 Br. Antarct. Surv. Bull.  
 Br. J. Herpet.  
 Br. med. J.  
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 Braz. J. Bot. (Revta Bras. Bot.)  
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 Bull. Acad. serbe Sci. Cl. Sci. math. nat.  
 Bull. Am. met. Soc.  
 Bull. Am. Mus. nat. Hist.  
 Bull. Aquacult. Assoc. Canada  
 Bull. atom. Scient.  
 Bull. Bernice P. Bishop Mus.  
 Bull. Bingham oceanogr. Colln  
 Bull. biol. Fr. Belg.  
 Bull. biol. Soc. Wash.  
 Bull. Br. Mus. nat. Hist.  
 Bull. can. Petrol. Geol.  
 Bull. Carnegie Mus. nat. Hist.  
 Bull. Cent. Étud. Rech. scient., Biarritz  
 Bull. cent. mar. Fish. Res. Inst., Cochín  
 Bull. Cent. natn. Rech. oceanogr. Pêch., Mauriti.  
 Bull. Cent. Rech. Explor.-Prod. Elf-Aquitaine  
 Bull. chem. Soc. Japan  
 Bull. Chin. Acad. geol. Sci.  
 Bull. coast. Soc.  
 Bull. Coll. Sci., Univ. Ryukyus  
 Bull. Conn. Arbor.  
 Bull. Conn. St. geol. nat. Hist. Surv.  
 Bull. Disaster Prevent. Res. Inst., Kyoto Univ.  
 Bull. Earthq. Res. Inst., Univ. Tokyo  
 Bull. ecol. Soc. Am.



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 Bull. Étud. commun Médit.  
 Bull. Fac. Bioresources, Mie Univ.  
 Bull. Fac. Fish. Hokkaido Univ.  
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 Bull. Fac. Fish. Nagasaki Univ.  
 Bull. far Seas Fish. Res. Lab.  
 Bull. Fish. Res. Bd Can.  
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 Bull. Fla St. Mus. biol. Sci.  
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 Bull. Hokkaido natn. Fish. Res. Inst.  
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 Bull. Inst. chem. Res., Kyoto Univ.  
 Bull. Inst. fondament. Afr. noire  
 Bull. Inst. Géol. Bassin Aquitaine  
 Bull. Inst. Oceanogr. Fish., Arab  
 Repub. Egypt  
 Bull. Inst. océanogr., Monaco  
 Bull. Inst. Océanogr. Pêche,  
 Salammbo  
 Bull. Inst. r. Sci. nat. Belg.  
 Bull. Inst. scient., Rabat  
 Bull. inter-Am. trop. Tuna Commn  
 Bull. Japan Sea natn. Fish. Res. Inst.  
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 Bull. japan. Soc. Phycol.  
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 Bull. Kanagawa Pref. Fish. expl Stn.  
 Bull. Kanagawa Pref. Mus., Nat.  
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 Bull. Kobe mar. Obs.  
 Bull. Korea Ocean Res. Dev. Inst.  
 Bull. Korean Fish. Soc.  
 Bull. Liaison, ASEQUA  
 Bull. mar. Biol. Res. Center, Tajura,  
 Libya  
 Bull. mar. Biol. Stn, Asamushi, Tō-  
 hoku Univ.  
 Bull. mar. biol. Stn, Jeju natn. Univ.,  
 Korea  
 Bull. mar. Ecol.  
 Bull. mar. Geosci. Grp, Univ. Cape  
 Town  
 Bull. mar. Park Res. Stns  
 Bull. mar. Res. Cent., Tripoli, Libya  
 Bull. mar. Resour. Res. Inst., Cheju  
 natn. Univ., Korea  
 Bull. mar. Sci.  
 Bull. mathl Biol.  
 Bull. Mt Desert Isl. biol. Lab.  
 Bull. Mus. comp. Zool. Harv.  
 Bull. Mus. Hist. nat. Marseille  
 Bull. Mus. natn. Hist. nat., Paris  
 Bull. Nansei natn. Fish Res. Inst.  
 Bull. Nansei reg. Fish. Res. Lab.  
 Bull. natn. Fish. Univ. Pusan  
 Bull. natn. Mus. St. Singapore  
 Bull. natn. Pearl Res. Lab.  
 Bull. natn. Res. Inst. Aquaculture  
 Bull. natn. Res. Inst. Fish. Engng,  
 Ibaraki  
 Bull. natn. Sci. Mus., Tokyo  
 Bull. N.Z. Dep. scient. ind. Res.  
 Bull. Ocean Res. Inst. Univ. Tokyo  
 Bull. Osaka Mus. nat. Hist.  
 Bull. Plankt. Soc. Japan  
 Bull. R. Soc. N.Z.  
 Bull. S. Afr. Ass. mar. Res.  
 Bull. Sch. mar. Sci., Univ. Cochin  
 Bull. scient. Cons. Acads RSF  
 Yougosl.  
 Bull. Scripps Inst. Oceanogr.  
 Bull. Seikai reg. Fish. Res. Lab.  
 Bull. seism. Soc. Am.  
 Bull. Soc. bot. Fr.  
 Bull. Soc. géol. Fr.  
 Bull. Soc. Hist. nat. Afr. N.  
 Bull. Soc. linn. Normandie  
 Bull. Soc. phycol. Fr.  
 Bull. Soc. r. Sci. Liège  
 Bull. Soc. Sci. nat. Ouest Fr.  
 Bull. Soc. scient. Bretagne  
 Bull. Soc. zool. Fr.  
 Bull. Socs chim. belg.  
 Bull. south. Calif. Acad. Sci.  
 Bull. Statist. pêches marit.  
 Bull. Stn Biol. Arcachon  
 Bull. Tōhoku reg. Fish. Res. Lab.  
 Bull. Tokai reg. Fish. Res. Lab.  
 Bull. Tong-Yeong Fish. Jr. Coll.  
 Bull. Torrey bot. Club  
 Bull. U.S. Coast Guard  
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 Bull. U.S. natn. Mus.  
 Bull. Utah geol. Miner. Surv.  
 Bull. volcan.  
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 Bull. zool. Mus. Univ. Amst.  
 Cah. Inf., SOUQAR, Québ.  
 Cah. Inf. Stn biol. mar. Grande-  
 Rivière  
 Cah. océanogr.  
 Cah. ORSTOM, Sér. Hydrobiol.  
 Cah. ORSTOM, Sér. Océanogr.  
 Cah. Pacif.  
 Calanus  
 Caldasia  
 Calif. coop. ocean. Fish. Invest.  
 Calif. Fish Game  
 Can. Bull. Fish. aquat. Sci.  
 Can. Fld-Naturalist  
 Can. geotech. J.  
 Can. J. Bot.  
 Can. J. Chem.  
 Can. J. Earth Sci.  
 Can. J. Fish. aquat. Sci.  
 Can. J. Microbiol.  
 Can. J. Phys.  
 Can. J. Zool.  
 Can. Soc. Petrol. Geol. Mem.  
 Can. spec. Publ. Fish. aquat. Sci.  
 Can. tech. Rept Fish. aquat. Sci.  
 Cape Naturalist  
 Carib. J. Sci.  
 Carnivore  
 Cent. mar. Fish. Res. Inst. (CMFRI)  
 Maricult. Ser.  
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 spec. Publ.  
 Cent. mar. Fish. Res. Inst. (CMFRI)  
 tech. Ext. Ser.  
 CENTRO  
 Cercetări mar.  
 Cetology  
 Chem. Br.  
 Chem. Commun.  
 Chem. Engng News  
 Chem. Geol.  
 Chem. Ind.  
 Chem. int.  
 Chem. Soc. Revs  
 Chem. Technol.  
 Chemico-biol. Interactions  
 Chemie Erde  
 Chemosphere  
 Chesapeake Bay Inst., Johns Hop-  
 kins Univ., graph. Summ. Rept  
 Chesapeake Bay Inst., Johns Hop-  
 kins Univ., spec. Rept  
 Chesapeake Sci.  
 Chilton's I & CS  
 Chinese J. Oceanol. Limnol.  
 Chromatog. Rev.  
 Chromatographia  
 Ciênc. mar., Baja Calif., Méx.

Ciência Cult., S Paulo  
 Ciencia interamer.  
 Ciência, Méx.  
 Ciencia Tecnol. Mar, Valparaiso  
 Ciencias Biol.  
 Ciencias, Cent. Investnes mar.,  
 Univ. Habana  
 Cimbebasia  
 Circ. N.Y. St. Mus. Sci. Serv.  
 Circ. U.S. geol. Surv.  
 Clay Miner. Bull.  
 Clays Clay Miner.  
 Clim. Change  
 Clim. Notes  
 Climate Dynam.  
 Climate Monit.  
 CNRS Res.  
 Coast. Engng, Amst.  
 Coast. Engng Japan  
 Coast. estuar. Sci., Am. geophys.  
 Un. Monogr. Ser.  
 Coast. Stud. Bull., La  
 Coast. Zone Mgmt J.  
 CODATA Bull.  
 Coenoses  
 Coll. oceanic Wks  
 Colloid, Polymer Sci.  
 Commentat. biol.  
 Commentat. phys.-math.  
 Comm. Fish Farmer  
 Commonw. scient. ind. Res. Orgn,  
 Div. atmos. Phys., tech. Pap.,  
 Victoria  
 Commonw. scient. ind. Res. Orgn,  
 Div. Fish. Oceanogr., Rept, Syd-  
 ney  
 Communs Dubl. Inst. advd Stud.  
 Communs pure appl. Math.  
 Comp. Biochem. Physiol.  
 Comp. Seismol.  
 Comput. J.  
 Comput. Vis., Graph., Image  
 process.  
 Computer  
 Computers, Geosciences  
 Comun. Mus. argent. Cienc. nat.  
 Bernardino Rivadavia Inst. nac.  
 Invest. Cienc. nat.  
 Conserv. Recycling  
 Continent. Shelf Res.  
 Contr. Askö Lab. Univ. Stockholm  
 Contr. atmos. Phys.  
 Contr. Cushman Fdn foram. Res.  
 Contr. geophys. Inst. Kyoto Univ.  
 Contr. Life Sci. Div. R. Ont. Mus.  
 Contr. mar. Sci. Univ. Texas  
 Contr. Miner. Petrology

Contr. Sci., nat. Hist. Mus. Los  
 Angeles  
 Contr. Sedimentol.  
 Contrções Inst. oceanogr. Univ. S  
 Paulo  
 Contrib. cient. Cent. Invest. Biol.  
 mar., CIBIMA  
 Contrib. téc. Cent. Invest. Biol. mar.,  
 Argent.  
 Contrnes agropecuarias pesq.  
 Contrnes Inst. antart. argent.  
 Contrnes Inst. Biol. mar., Mar del  
 Plata  
 Copeia  
 Coral Reefs  
 Corros. Sci.  
 Corrosion  
 CRC critical Rev. environ. Control  
 CRC critical Rev. Microbiol.  
 Cret. Res.  
 Crustacean Issues  
 Crustaceana  
 Cryobiology  
 Cryptogam. Algal.  
 CSIR Rept, EMA, S.Afr.  
 CSIR Rept, T/Sea, S.Afr.  
 CSIR Res. Rept, S. Afr.  
 CSIRO Div. atmos. Res. tech. Pap.  
 CSIRO mar. Labs Rept  
 CSK Data Rept  
 Cuad. oceanogr.  
 Curator, Am. Mus. nat. Hist.  
 Curr. Contents, ISI  
 Curr. Microbiol.  
 Curr. Res., Geol. Surv., Israel  
 Curr. Sci.  
 Cushman Fdn foram. Res. spec.  
 Publ.  
 Cybium

Daedalus, Boston  
 Dana  
 Data oceanogr. Obsns explor.  
 Fishgs, Shimonoseki Univ.  
 Data Rec. oceanogr. Obsns explor.  
 Fishg, Hokkaido Univ.  
 Data Rept hydrogr. Obsns, Tokyo  
 Data Rept inter-Am. trop. Tuna  
 Commn  
 Deep-Sea Res.  
 Delft Prog. Rept  
 Denkschr. schweiz. naturf. Ges.  
 Devs solid Earth Geophys.  
 Diatom Res.  
 Dis. aquat. Org.  
 Discover

Doc. scient. Cent. Rech. océanogr.,  
 Abidjan  
 Doc. scient. Cent. Rech. océanogr.,  
 Dakar-Thiaroye  
 Documentos téc., Fund. Univ. Rio  
 Grande  
 Documn Servs, natn. Inst.  
 Oceanogr., Lib., India  
 Docums Lab. Géol. Lyon, Univ.  
 Claude-Bernard  
 Docums scient. Cent. Pointe-Noire,  
 ORSTOM  
 Docums Trav. Cent. Geol.,  
 Geophys., Montpellier  
 Dokl. Akad. Nauk BSSR  
 Dokl. Akad. Nauk SSSR  
 Dokl. biol. Sci. (a translation of  
 Dokl. Akad. Nauk SSSR)  
 Dokl. Earth Sci. Sect. (a translation  
 of Dokl. Akad. Nauk SSSR)  
 Dt. geod. Komm.  
 Dt. hydrogr. Z.  
 Durban Mus. Novit.  
 Dynam. Atmos. Oceans

Earth, Moon, Planets  
 Earth oriented Applic. Space  
 Technol.  
 Earth planet. Sci. Letts  
 Earth Sci. Hist.  
 Earthq. Info. Bull.  
 Earthq. Notes, seism. Soc. Am.  
 Earth-Sci. Rev.  
 Eclog. geol. Helv.  
 Ecol. Model.  
 Ecol. Monogr.  
 Ecol. Res.  
 Ecologist  
 Ecology  
 Ecology Law Q.  
 Econ. Dev. cult. Change  
 Econ. Geol.  
 Economist  
 Ecos  
 Einzelveröff. SeewettAmt  
 Ekol. mor., Akad. Nauk Ukr. SSR  
 Ekol. pol.  
 Ekologiya  
 Electronics  
 Electronics Letts  
 Endeavour, New Series  
 Engng Geol.  
 Engng Issues, Proc. Am. Soc. civ.  
 Engrs  
 Engng Struct.  
 Environ. Affairs



- Environ. Biol. Fishes  
 Environ. Conserv.  
 Environ. expl Bot.  
 Environ. Geol.  
 Environ. Geol. Wat. Sci.  
 Environ. Hlth Perspect.  
 Environ. Impact Assess. Rev.  
 Environ. Law, Portland  
 Environ. Mgmt  
 Environ. Monit. Assessment  
 Environ. Pollut.  
 Environ. Res. Cent. Pap.  
 Environ. Sci. Technol.  
 Environment  
 Environment int.  
 Environmentalist  
 Eos  
 Episodes  
 Ergänzhft dt. hydrogr. Z.  
 Estuar. coast. mar. Sci.  
 Estuar. coast. Shelf Sci.  
 Estuaries  
 Estud. Oceanol.  
 Ethology  
 Eur. Aquacult. Soc.  
 Eur. J. appl. Microbiol. Biotechnol.  
 Eur. J. Protistol.  
 Evol. Biol.  
 Evol. Monogr.  
 Evol. Theory  
 Evolution  
 Excerpta bot.  
 Experientia  
 Expl Biol.  
 Explor. Fauna Seas, Zool. Inst.,  
 Acad. Sci. USSR
- Fish Bull. Calif. Resour. Ag.  
 Fish. Bull., S. Afr.  
 Fish Farming int.  
 Fish. mar. Serv., Ms. Rept Ser., Can.  
 Fish. mar. Serv., tech. Rept, Can.  
 Fish. Res.  
 Fish. Res. Bull., N.Z.  
 Fish. Res. tech. Rept, Minist. Agric.  
 Fish. Fd, Gt Br.  
 Fish. tech. Rept, Minist. Agric.  
 Fish., N.Z.  
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 Fishery Bd Sweden Inst. mar. Res.  
 Rept  
 Fishery Bull. natn. mar. Fish. Serv.,  
 U.S.  
 Fishery Invest.  
 Fishg News int.  
 FiskDir. Skr., Ser. Fisk.  
 FiskDir. Skr., Ser. Havunders.  
 Fiskten Hav.  
 Fiz. Atmosf. Okeana  
 Fiz. Zemli  
 Fla mar. Res. Lab., spec. scient.  
 Repts  
 Fla mar. Res. Publs  
 Fla Scient.  
 Flora Fauna, Århus  
 Flora, Jena  
 Földt. Közl.  
 Folia, Fac. scient. nat. Univ.  
 Purkyně Brně  
 Folia Geogr. Danica  
 Folia microbiol., Praha  
 Foraminifera  
 Foreign Affairs  
 Foreign Policy  
 Fortschr. Zool.  
 Fragn. balc.  
 Fragn. faun.  
 Freiburger Forschft.  
 Fres. J. analyt. Chem.  
 Freshwat. Biol.  
 Frontiers  
 Functional Ecol.  
 Fundam. appl. Toxicol.
- G. bot. ital.  
 Galathea Rept  
 Galaxea  
 Gayana  
 Gegenbaurs morph. Jb.  
 Geochem. int. (a translation of  
 Geokhimiya)  
 Geochem. J.  
 Geochim. cosmochim. Acta
- Géochronique  
 Geod. Inst. Skr., Kbh.  
 Geodät. geophys. Veröff.  
 Geodinam. Acta  
 Geof. Int.  
 Geofiz. Byull.  
 Geofiz. Sb.  
 Geoforum  
 Geofys. Publ  
 Geogr. Annlr  
 Géogr. phys. Quat.  
 Geograf. Tidsskr.  
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 Geologiya Geofiz., Novosibirsk  
 Geologiya Geokhim.  
 Geology, geol. Soc. Am.  
 Geomagn. Aeron. (a translation of  
 Geomagnetizm i Aeronomiya)  
 Geo-Marine Letts  
 Geomicrobiol. J.  
 Geophys. astrophys. Fluid Dynam.  
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 Geophys. J.  
 Geophys. J. int.  
 Geophys. Jl R. astr. Soc.  
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 Geophys. Monogr. Am. geophys.  
 Un.  
 Geophys. Notes, Tokyo  
 Geophys. Prospect.  
 Geophys. Res. Letts  
 Geophys. Surv.  
 Geophysica  
 Geophysica norv.  
 Geophysics  
 Geosci., Can.  
 Geostandards Newsl.  
 Géotechnique  
 Geotectonics (a translation of Geo-  
 tektonika)  
 Geotektonika  
 Geotektonika, Tektonophysika,  
 Geodynamika
- FAO Fish. Circ.  
 FAO Fish. Rept  
 FAO Fish. tech. Pap.  
 FAO Infmes Pesca  
 FAO Statist. Ser.  
 Fauna caribaea  
 Fauna fenn.  
 Fauna Flora, Upps.  
 Fed. Proc., FASEB  
 Feddes Reprim  
 FEMS Microbiol. Ecol.  
 FEMS Microbiol. Letts  
 FEMS Microbiol. Revs  
 Fieldiana  
 Fieldiana, Bot.  
 Fieldiana, Geol.  
 Fieldiana, Zool.  
 Finn. Fish. Res.  
 Finn. mar. Res.

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Gesammelte Sonderdr., Inst.  
Hydrobiol. FischWiss., Univ.  
Hamb.  
Gidrobiol. Zh.  
Gidrokhim. Mater.  
Glasg. Nat.  
Global biogeochem. Cycles  
Gulf Res. Repts  
Gunneria
- Hafrannsóknir  
Haliotis  
Harvard environ. Law Rev.  
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Herpetologica  
Hidrobiologie  
Hidrotehnica  
Hist. Rec. Aust. Sci.  
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Houille blanche  
Human Ecol.  
Hvalrad. Skr.  
Hydrobiol. J. (a translation of  
Gidrobiol. Zh.)  
Hydrobiologia  
Hydrogr. Newsl., Neth.
- Icarus  
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ICES Mar. Sci. Symp.  
IEEE Comput. Graph. Applic.  
IEEE Jl ocean. Engng  
IEEE Spectrum  
IEEE Trans. Aerosp. electron. Syst.  
IEEE Trans. biomed. Engng  
IEEE Trans. Circuits, Syst.  
IEEE Trans. Comput.  
IEEE Trans. Instrumn Measmt  
IEEE Trans. Signal Process.  
IEEE Trans. Ultrasonics,  
Ferroelect., Freq. Ctrl  
IMA J. Math. appl. Med., Biol.  
IMCO News  
IMO News  
Impact Sci. Soc.  
Ind. Engng Chem. Fundam.  
Ind. Engng Chem. Process Des.  
Dev.  
Ind. Engng Chem. Prod. Res. Dev.  
Indian J. Fish.  
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Inf. Ser. R. Scott. Mus., nat. Hist.  
Infme tec., CICESE  
Infmes Inst. Mar Perú  
Infmes Pesq., Chile  
Infmes téc. Inst. esp. Oceanogr.,  
Madrid  
Infmes tec. Inst. Investnes Pesq.,  
Barcelona  
Informatore Bot. ital.  
Informe tec., Inst. Investnes Pesq.,  
Maracaibo  
Initial Repts Deep Sea Drilling Proj.  
Inst. Antart. Argent. Publ.  
Inst. Antart. Chil. Ser. cient.  
Inst. mar. Res. oceanogr. Cruise  
Rept, Jakarta  
Inst. natn. Santé Rech. méd., Sér. 1:  
Polluants Mer  
Inst. Oceanogr. Sci. Rept  
Inst. Rept Ser. Univ. Oslo Inst.  
Geofys.  
Instrumn Technol.  
Instrums Control Syst.  
Int. Biodeterior.  
Int. Biodeterior. Bull.  
Int. Commn NW Atlant. Fish. Res.  
Bull.  
Int. Geol. Rev.  
Int. hydrogr. Rev.  
Int. J. appl. Radiat. Isotopes  
Int. J. Chronobiol.  
Int. J. Climatol.  
Int. J. estuar. coast. Law  
Int. J. Heat Mass Transfer  
Int. J. Invert. Reprod.  
Int. J. Mass Spectrom., Ion Proc.  
Int. J. Micrographics Video  
Technol.  
Int. J. Oceanol. Limnol.  
Int. J. Radiat. Appl. Instrum. (Part  
A, Appl. Radiat. Isotopes)  
Int. J. Radiat. Biol.  
Int. J. Remote Sens.  
Int. J. syst. Bact.  
Int. leg. Mater.  
Int. Metals Rev.  
Int. Orgn  
Int. Revue ges. Hydrobiol.  
Int. Seaweed Symp. Proc.  
Int. Stud. Q.  
Int. Wildl.  
InTech  
Interciencia  
Interdiscipl. Sci. Rev.  
Inv. mar. CICIMAR
- Inverse Problems  
Investigación pesq., Barcelona  
Investigación pesq., Santiago  
Investl Rept, Div. Sea Fish., Repub.  
S. Afr.  
Investl Rept, oceanogr. Res. Inst.,  
Durban  
Investnes mar., Valparaiso  
Investnes oceanol. Chil.  
Invests Fish Control  
Ir. Fish. Invest.  
Ir. Nat. J.  
Isis  
Isotope Geosci.  
Israel J. Bot.  
Israel J. Earth-Sci.  
Israel J. Zool.  
Issues Engng, Am. Soc. civ. Engrs  
Issues Sci. Tech.  
Istanb. Üniv. Fen Fak. Hidrobiol.  
Istanb. Üniv. Fen Fak. Mecm.  
I.U.G.G. Chronicle  
Izv. Akad. Nauk SSSR, Ser. Biol.  
Izv. Akad. Nauk SSSR, Ser. Geogr.  
Izv. Akad. Nauk SSSR, Ser. Geol.  
Izv. Atmos. Ocean Phys. (a trans-  
lation of Fiz. Atmos. Okeana)  
Izv. na Inst. Ribni Resursi-Varna  
Izv. nauchno-issled. Inst. Okeanogr.  
Ribno Stopan., Varna  
Izv. tikhookean. nauchno-issled.  
Inst. ryb. Khoz. Okeanogr.  
(TINRO)  
Izv. vses. geogr. Obshch.
- J. acoust. Soc. Am.  
J. Aerospace Engng  
J. Afr. Earth Sci.  
J. Air Pollut. Control Ass.  
J. Air, Waste Mgmt Ass.  
J. Am. med. Ass.  
J. Am. Oil Chem. Soc.  
J. Am. Stat. Assoc.  
J. Am. Wat. Wks Ass.  
J. analyt. appl. Pyrolysis  
J. analyt. atomic Spectrometry  
J. Anim. Ecol.  
J. appl. Bact.  
J. appl. Cryst.  
J. appl. Ecol.  
J. appl. Met.  
J. appl. Phycol.  
J. appl. Phys.  
J. appl. Polymer Sci.  
J. Aquaricult. aquat. Sci.  
J. atmos. Chem.



- J. atmos. ocean. Technol.  
 J. atmos. Sci.  
 J. atmos. terr. Phys.  
 J. automat. Chem.  
 J. Bact.  
 J. basic Microbiol.  
 J. Biochem., Tokyo  
 J. Biogeogr.  
 J. biol. Chem.  
 J. biol. fotogr. Ass.  
 J. biol. Rhythms  
 J. Bombay nat. Hist. Soc.  
 J. Boston Soc. civ. Engrs Sect., Am.  
     Soc. civ. Engrs  
 J. chem. Ecol.  
 J. chem. Educ.  
 J. chem. Inf. Comput. Sci.  
 J. Chem. Res. (S)  
 J. chem. Technol. Biotechnol.  
 J. Chromatog.  
 J. chromatog. Sci.  
 J. Climate  
 J. Climate appl. Met.  
 J. Climatol.  
 J. clin. Microbiol.  
 J. coast. Res.  
 J. cold Regions Engng, Am. Soc. civ.  
     Engrs  
 J. Colloid Interface Sci.  
 J. comp. Ethol. (Z. Tierpsychol.)  
 J. comp. Phys.  
 J. comput. civ. Engng, Am. Soc. civ.  
     Engrs  
 J. Cons. int. Explor. Mer  
 J. Constr. Div., Am. Soc. civ. Engrs  
 J. crustacean Biol.  
 J. Docum.  
 J. Earth Sci. Nagoya Univ.  
 J. Earth Sci. R. Dubl. Soc.  
 J. Ecol.  
 J. Electron Microsc. Techniq.  
 J. Electron Microsc., Tokyo  
 J. Elisha Mitchell scient. Soc.  
 J. Energy Div., Am. Soc. civ. Engrs  
 J. Energy Engng, Am. Soc. civ.  
     Engrs  
 J. Engng Mech., Am. Soc. civ. Engrs  
 J. Engng Mech. Div., Am. Soc. civ.  
     Engrs  
 J. environ. Econ. Mgmt  
 J. environ. Educ.  
 J. environ. Engng, Am. Soc. civ.  
     Engrs  
 J. environ. Engng Div., Am. Soc. civ.  
     Engrs  
 J. environ. Qual.  
 J. environ. Radioactivity
- J. evol. Biol.  
 J. expl Biol.  
 J. expl Bot.  
 J. expl mar. Biol. Ecol.  
 J. expl Zool.  
 J. Fac. appl. biol. Sci., Hiroshima  
     Univ.  
 J. Fac. Fish. Anim. Husb., Hiro-  
     shima Univ.  
 J. Fac. mar. Sci., King Abdul. Univ.,  
     Jeddah  
 J. Fac. mar. Sci. Technol., Tokai  
     Univ.  
 J. Fac. Sci. Hokkaido Univ.  
 J. Fac. Sci. Univ. Tokyo  
 J. Fish Biol.  
 J. Fish. Res. Bd Can.  
 J. Fish. Soc., Taiwan  
 J. Fld Orn.  
 J. Fluid Mech.  
 J. foram. Res.  
 J. Franklin Inst.  
 J. gen. Microbiol.  
 J. geochem. Explor.  
 J. Geodynam.  
 J. Geol.  
 J. geol. Soc., Lond.  
 J. Geomagn. Geoelect.  
 J. geophys. Res.  
 J. Geophys. (Z. Geophys.)  
 J. Geosci. Osaka Cy Univ.  
 J. geotech. Engng, Am. Soc. civ.  
     Engrs  
 J. geotech. Engng Div., Am. Soc. civ.  
     Engrs  
 J. Glaciol.  
 J. Gt Lakes Res.  
 J. high Resolution Chromatog. and  
     Chromatog. Commun.  
 J. Hist. Biol.  
 J. Hist. Ideas  
 J. Hydraul. Div., Am. Soc. civ.  
     Engrs  
 J. hydraul. Engng, Am. Soc. civ.  
     Engrs  
 J. hydraul. Res.  
 J. Hydrol.  
 J. Ichthyol.  
 J. Indian Inst. Sci.  
 J. Inst. Navig.  
 J. int. Ass. mathl Geol.  
 J. interdiscipl. Cycle Res.  
 J. interdiscipl. Model. Simul.  
 J. Law Econ.  
 J. Life Sci., R. Dubl. Soc.  
 J. liquid Chromatog.  
 J. Madras Univ.
- J. Mammal.  
 J. mar. biol. Ass. India  
 J. mar. biol. Ass. U.K.  
 J. mar. Res.  
 J. marit. Law Commerce  
 J. Math. Kyoto Univ.  
 J. Math. Phys.  
 J. mathl Biol.  
 J. Met.  
 J. met. Res. Tōhoku Distr.  
 J. met. Soc. Japan  
 J. metamorphic Geol.  
 J. Micropalaeontology  
 J. Microsc.  
 J. molluscan Stud.  
 J. Morphology  
 J. N. Am. Benthol. Soc.  
 J. nat. Hist.  
 J. nat. Prod.  
 J. Navig.  
 J. new Alchemists  
 J. Ocean Univ., Qingdao  
 J. oceanogr. Soc. Japan  
 J. Oceanogr. Taiwan Strait  
 J. oceanol. Soc. Korea  
 J. opt. Soc. Am.  
 J. opt. Soc. Am., Opt. Image Sci., A  
 J. opt. Soc. Am., opt. Phys., B  
 J. org. Chem.  
 J. Orn., Lpz.  
 J. Paleont.  
 J. Petrol. Geol.  
 J. Petrol. Technol.  
 J. Petrology  
 J. Phil.  
 J. Photogr. Sci.  
 J. Phycol.  
 J. Phys., appl. Phys., D  
 J. phys. Chem. Earth  
 J. Phys. Earth  
 J. Phys. (Fr.)  
 J. Phys., mathl gen., A  
 J. phys. Oceanogr.  
 J. Phys., scient. Instrums, E  
 J. Physiol., Lond.  
 J. Plankt. Res.  
 J. Policy Analysis Mgmt  
 J. Policy Model.  
 J. polit. Econ.  
 J. Power Div., Am. Soc. civ. Engrs  
 J. Proc. R. Soc. N.S.W.  
 J. prof. Issues Engng, Am. Soc. civ.  
     Engrs  
 J. Protozool.  
 J. R. statist. Soc.  
 J. Radiat. Res.  
 J. radioanalyt. Chem.

- J. radioanalyt. nucl. Chem.  
 J. Rech. océanogr.  
 J. Res. natn. Bur. Standards  
 J. Res., U.S. geol. Surv.  
 J. sanit. Engng Div., Am. Soc. civ. Engrs  
 J. Sch. mar. Sci. Technol., Tokai Univ.  
 J. Sci. Hiroshima Univ.  
 J. sedim. Petrology  
 J. Sedimentol.  
 J. Shandong Coll. Oceanol.  
 J. Shellfish Res.  
 J. Sherkin Isl.  
 J. Shimonoseki Univ. Fish.  
 J. Shoreline Mgmt  
 J. Soc. Bibliophy nat. Hist.  
 J. social biol. Struct.  
 J. Sound Vibr.  
 J. struct. Div., Am. Soc. civ. Engrs  
 J. struct. Engng, Am. Soc. civ. Engrs  
 J. struct. Geol.  
 J. Surv. Engng, Am. Soc. civ. Engrs  
 J. Surv. Map. Div., Am. Soc. civ. Engrs  
 J. tech. Coun. ASCE  
 J. theor. Biol.  
 J. therm. Biol.  
 J. Time Ser. anal.  
 J. Tokyo Univ. Fish.  
 J. Toxicol. environ. Hlth  
 J. Transpn Engng, Am. Soc. civ. Engrs  
 J. Univ. Sheffield geol. Soc.  
 J. urban Plann. Div., Am. Soc. civ. Engrs  
 J. Volcanol. geotherm. Res.  
 J. Wash. Acad. Sci.  
 J. Wat. Pollut. Control Fed.  
 J. Wat. Resour. Plann. Mgmt, Am. Soc. civ. Engrs  
 J. Wat. Resour. Plann. Mgmt Div., Am. Soc. civ. Engrs  
 J. WatWay Port coast. Ocean Div., Am. Soc. civ. Engrs  
 J. WatWay Port coast. Ocean Engng, Am. Soc. civ. Engrs  
 J. Wildl. Mgmt  
 J. Wld Aquacult. Soc.  
 J. Wld Maricult. Soc.  
 J. Zool., Proc. zool. Soc. Lond.  
 Japan. J. Ecol.  
 Japan. J. Geol. Geogr.  
 Japan. J. Phycol.  
 Japan. Prog. Clim.  
 JARE Data Repts  
 JARE—scient. Rept
- Jb. nassau. Ver. Naturk.  
 Jber. dt. Fischwirt.  
 Jeddah J. mar. Res.  
 JI E. Afr. nat. Hist. Soc. natn. Mus.  
 JI NW Atlant. Fish. Sci.  
 JI R. microsc. Soc.  
 JI R. Soc. N.Z.  
 JI R. Soc. west. Aust.  
 Johns Hopkins APL tech. Dig.  
 Johns Hopkins oceanogr. Stud.  
 JOIDES J.  
 Jökull
- K. norske Vidensk. Selsk. Mus. Miscnea  
 K. norske Vidensk. Selsk. Skr.  
 Kasetsart Univ. Fish. Res. Bull., Bangkok  
 Kenya Aquat.  
 Kieler Meeresforsch.  
 KORDI Rept  
 Kumamoto J. Sci., Biol.  
 Kuste  
 Kuwait Bull. mar. Sci.
- La Dep. Wildl. Fish. tech. Bull.  
 Lagena  
 Lancet  
 Land Econ.  
 Lap. penelit. Perik. Laut, Jakarta  
 Leading Edge  
 Lethaia  
 Lettere Nuovo Cim.  
 Letts appl. Microbiol.  
 Lighthouse  
 Limnol. Oceanogr.  
 Limnologica, Berl.  
 Lipids  
 Lithos  
 Low Temp. Sci.  
 Luonnon Tutk.
- Mahasagar  
 Malacol. Rev.  
 Malacologia  
 Malays. J. Sci.  
 Mar. Affairs J.  
 Mar. Behav. Physiol.  
 Mar. Biol.  
 Mar. Biol. Letts  
 Mar. Chem.  
 Mar. Ecol. (P.S.Z.N. I)  
 Mar. Ecol.-Prog. Ser.  
 Mar. environ. Res.
- Mar. Fish. Res., Qingdao  
 Mar. Geod.  
 Mar. Geol.  
 Mar. Geol. Quat. Geol.  
 Mar. geophys. Res.  
 Mar. Geotechnol.  
 Mar. mamm. Sci.  
 Mar. microb. Food Webs  
 Mar. Micropaleont.  
 Mar. Min.  
 Mar. Obsr  
 Mar. Ornithol.  
 Mar. Pesca  
 Mar. Petrol. Geol.  
 Mar. Policy  
 Mar. Pollut. Bull.  
 Mar. Res.  
 Mar. Res. Indonesia  
 Mar. resour. Econ.  
 Mar. Sci., Beijing  
 Mar. Sci. Communs  
 Mar. Sci. Inf. Direct., Dept. Fish. Oceans, Ms. Rept Ser., Can.  
 Mar. Technol. Soc. J.  
 Mariners Weath. Log  
 Marit. Policy Mgmt  
 Marit. Sed.  
 Marit. Sed. Atlant. Geol.  
 Marit. Sed. spec. Publs  
 Marit. Stud. Mgmt  
 Maritimes  
 Mater. Engng  
 Mater. Perform.  
 Materialy Rybokhoz. Issled. Severn. Bassein. (PINRO)  
 Mat.-fys. Meddr Danske vidensk. Selskab  
 Math. Computation  
 Mathl Biosci.  
 Mathl Geol.  
 Mathl Proc. Camb. phil. Soc.  
 Mausam  
 McGill Univ. mar. Sci. Cent. Ms. Rept  
 Meddr Danm. Fish.-og Havunders.  
 Meddr Grønland  
 Meddr norsk Polarinst.  
 Meddr Skalling-Lab.  
 Meded. Verh. K. Ned. met. Inst.  
 Medio Ambiente  
 Meeresforschung (Repts mar. Res.)  
 Meeresk. Beob. Ergebn., Dt. Hydrogr. Inst.  
 Mém. Acad. r. Belg. Cl. Sci.  
 Mem. Aust. Mus.  
 Mem. Coll. Agric., Kyoto Univ.  
 Mem. Ehime Univ.



- Mem. Fac. Fish. Hokkaido Univ.  
 Mem. Fac. Fish. Kagoshima Univ.  
 Mem. Fac. Sci. Kyoto Univ.  
 Mem. Fac. Sci. Kyushu Univ.  
 Mem. geol. Soc. Am.  
 Mem. geol. Soc. China, Taipei  
 Mém. Inst. oceanogr. Monaco  
 Mém. Inst. océanogr. Nhatrang  
 Mém. Lab. Géomorphol. Éc. prat.  
   hautes Étud.  
 Mém. Mus. natn. Hist. nat., Paris  
 Mem. natn. Mus. Vict.  
 Mem. paleont. Soc.  
 Mem. San Diego Soc. nat. Hist.  
 Mem. Sears Fdn mar. Res.  
 Mém. Soc. Hist. nat. Afr. N.  
 Mém. Soc. r. Can.  
 Mém. Soc. r. Sci. Liège  
 Mém. Soc. zool. Fr.  
 Memo. Soc. Fauna Flora fenn.  
 Memorie Biol. mar. Oceanogr.  
 Memorie Ist. ital. Idrobiol.  
 Memorie Mus. civ. Stor. nat. Verona  
 Memorie Soc. ital. Sci. nat., Milan  
 Memorie Soc. tosc. Sci. nat.  
 Mems Congr. nac. Oceanogr., Méx.  
 Mems Soc. Cienc. nat. 'La Salle'  
 Mer, Tokyo  
 Mercian Geol.  
 Merentutkimuslait. Julk.  
 Met. atmos. Phys.  
 Met. Inst., Uppsala Rept  
 Met. Mag., Lond.  
 Met Mar  
 Met. Monogr.  
 Metall. Trans.  
 Meteor Forschergebn.  
 Meteoritics  
 Météorologie  
 Meteorologische Rdsch.  
 Meteorologiya Gidrol.  
 Meteorology Hydrol., Bucuresti  
 Meth. Geochem. Geophys.  
 Meyniana  
 Microb. Ecol.  
 Microbiol. Rev.  
 Microbiology (a translation of  
   Mikrobiologiya)  
 Microbios  
 Microchem. J.  
 Microfauna Mar.  
 Micron  
 Micronesica  
 Micropaleont. spec. Publs  
 Micropaleontology  
 Microscope  
 Microscopica Acta  
 Microscopy  
 Mikrobiologiya  
 Mikrochim. Acta  
 Mikrofauna Meeresbodens  
 Mikroskopie  
 Mineral. Deposita  
 Mineralog. Mag.  
 Minerva  
 Minist. Ind. Commerce, Dir. Pêches  
   Marit. Dir. Rech. Cah. Inf., Can.  
 MIT Sea Grant Rept  
 Mitt. BundForschAnst. Fisch.  
 Mitt. Franzius-Inst. Univ. Hannover  
 Mitt. geol. Ges. Wien  
 Mitt. geol.-paläont. Inst. Univ.  
   Hamb.  
 Mitt. Hamb. Zool. Mus. Inst.  
 Mitt. Inst. Colombo-Alemán  
   Investnes cient.  
 Mitt. Inst. Meeresk. Univ. Hamb.  
 Mitt. Inst. Seefisch.  
 Mitt. int. Verein. theor. angew.  
   Limnol.  
 Mitt. zool. Mus. Berl.  
 Mitt. zool. Mus. Kiel  
 Mod. Geol.  
 Mon. Weath. Rev.  
 Monitore zool. ital. (Ital. J. Zool.)  
 Monogr. Am. Fish. Soc.  
 Monogr. mar. Mollusca  
 Monogr. Mét. natn.  
 Monogr. oceanogr. Methodol., U.N.  
 Monographiae biol.  
 Mosaic  
 Mosk. Obshch. ispyt. Prir. Otd. biol.  
 Mosk. Obshch. ispyt. Prir. Otd. geol.  
 Mycologia  
 Mycotaxon, N.Y.  
 N. Am. J. Fish. Mgmt  
 Nachr. Kart.- u. VermessWes.  
 Naga Rept, Scripps Inst. Oceanogr.  
 Nanhai Stud. mar. sin.  
 Nat. appl. Sci. Bull.  
 Nat. Disaster Sci.  
 Nat. Hist.  
 Nat. Resour. Environ.  
 Nat. Resour. J.  
 Nat. Resour. Law.  
 Nat. Sci. Rept, Ochanomizu Univ.  
 Natn. geogr.  
 Natn. geogr. Res.  
 Natn. Mus. N.Z. misc. Ser.  
 Natn. Mus. N.Z. Recs  
 Natn. Wildl.  
 Natur Mus., Frankf.  
 Natura, Milano  
 Naturaliste can.  
 Nature, Lond.  
 Naturopa  
 Naturwissenschaften  
 Nautilus  
 Nav. Res. Revs.  
 Navigation: J. Inst. Navigation  
 Navigation, Paris  
 NE environ. Sci.  
 NE Gulf Sci.  
 Neth. J. Sea Res.  
 Neth. J. Zool.  
 Neues Jb. Geol. Paläont. Abh.  
 Neues Jb. Geol. Paläont. Mh.  
 New Engl. J. Med.  
 New Phytol.  
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 New Yorker  
 News rept, U.S. NAS  
 Newsl. coop. Invest. Medit. (Bull.  
   Étud. commun Médit.)  
 Newsl. Stratig.  
 Newsweek  
 Nippon Kagaku Kaishi  
 Nippon Suisan Gakkaishi (Bull.  
   japan. Soc. scient. Fish.)  
 NOAA  
 Nord. J. Bot.  
 Norois  
 Norsk Hvalfangsttid.  
 Norw. J. Bot.  
 Norw. J. Zool.  
 Notas Estud. Inst. Biol. mar., Lisb.  
 Note Lab. Biol. mar. pesca Fano  
 Notes Fac. Fish. Kasetsart Univ.,  
   Bangkok  
 Notes Mém. Cie fr. Pétrol.  
 Notic. Galapagos  
 Notic. geomorf.  
 Notul. Nat.  
 Nova Acta Leopoldina  
 Nova Hedwigia  
 Nucl. chem. Waste Mgmt  
 Nucl. Instrum., Meth. Phys. Res.  
 Nuovo Cim.  
 Nytt Mag. Bot.  
 Nytt Mag. Zool.  
 N.Z. Antarct. Rec.  
 N.Z. J. Bot.  
 N.Z. J. Geol. Geophys.  
 N.Z. J. mar. Freshwat. Res.  
 N.Z. J. Sci.  
 N.Z. J. Sci. Technol.  
 N.Z. J. Zool.  
 N.Z. oceanogr. Inst. Mem.

NZOI Hydrol. Stn Data  
NZOI Rec.

Occ. Pap. Allan Hancock Fdn  
Occ. Pap. Bernice P. Bishop Mus.  
Occ. Pap. Biol., meml Univ. Nfld  
Occ. Pap. Calif. Acad. Sci.  
Occ. Pap. Farlow Herb. cryptogam.  
Bot.  
Occ. Pap. Law Sea Inst. Univ.  
Rhode Isl.  
Occ. Pap. Mus. nat. Hist., Univ.  
Kansas  
Occ. Pap. Mus. Vict.  
Occ. Pap. San Diego Soc. nat. Hist.  
Occ. Publ., Fish. Res. Div., Minist.  
Agric. Fish., N.Z.  
Occ. Publ., mar. biol. Ass. U.K.  
Occ. Publ., Univ. Mar. biol. Sta.,  
Millport  
Ocean Dev. int. Law  
Ocean Engng  
Ocean Ind.  
Ocean Mgmt  
Ocean Phys. Engng  
Ocean Res., KORDI  
Ocean Sci. Engng  
Ocean, Shoreline Mgmt  
Ocean-air Interactions  
Oceanic Sels  
Oceanis  
Oceanogr. mar. Biol. a. Rev.  
Oceanogr. Met.  
Océanographie trop., ORSTOM  
Oceanography  
Oceanogr. Mag.  
Oceanol. int.  
Oceanologia Limnol. sin.  
Oceanologia, Warsz.  
Oceanologica Acta  
Oceanology (a translation of  
Okeanologiia)  
Oceanology, Sofia  
Oceans  
Oceanus  
Oebalia  
Oecol. aquat.  
Oecologia  
Offshore  
Ofioliti  
Ohio J. Sci.  
Oikos  
Oil chem. Pollut.  
Oil Gas int.  
Oil Gas J.  
Oil Petrochem. Pollut.

Okeanologiia  
Omni  
Ophelia  
Opred. Faune SSSR, Akad. Nauk  
SSSR  
Oregon St. Univ. Sch. Oceanogr.,  
Data Repts  
Org. Geochem.  
Orig. Life  
Orig. Life, Evol. Biosph.  
Ornithol. Monogr.  
Oseanol. Indones.  
Osiris

Pacif. Discov.  
Pacif. Geol.  
Pacif. mar. Fish. Commn a. Rept  
Pacif. mar. Stn Res. Rept, Calif.  
Pacif. mar. Stn, spec. scient. Rept,  
Calif.  
Pacif. Sci.  
Pakistan J. scient. ind. Res.  
Pakistan J. Zool.  
Palaeogeogr. Palaeoclimatol.  
Palaeoecol.  
Palaeogeogr. Palaeoclimatol.  
Palaeoecol. (Global planet.  
Change Sect.)  
Palaeont., Stratig., Lithol.  
Palaeontology  
Palaos  
Paläontologische Z.  
Paleobiology  
Paleobios  
Paleoceanography  
Paleont. Contr. Univ. Kansas  
Paleontologicheskii Zh.  
Pap. Dep. Geol., Univ. Qd  
Pap. Met. Geophys., Tokyo  
Pap. phys. Oceanogr. Met.  
Pap. Proc. R. Soc. Tasm.  
Papéis Dep. Zool., S Paulo  
Pelagos  
Perspect. Biol. Med.  
Petermanns geogr. Mitt.  
Petrol. Geol. (A digest of Russian  
literature on Petroleum Geology)  
Petrol. Geol. Taiwan  
Phil. Mag.  
Phil. Rev.  
Phil. Trans. R. Soc.  
Philipp. J. Fish.  
Philipp. J. Sci.  
Philipp. Scient.  
Philosophy

Philosophy Sci.  
Photochem. Photobiol.  
Photogram. Engng, Remote Sens.  
Photosynthetica  
Phuket mar. biol. Cent. Res. Bull.  
Phycologia  
Phykos  
Phys. Chem. Earth  
Phys. Earth planet. Interiors  
Phys. Fluids A  
Phys. Letts  
Phys. Rev. Letts  
Phys. solid Earth (a translation of  
Fiz. Zemli)  
Phys. Technol.  
Phys. today  
Phys. World  
Physica, 's Grav.  
Physica, The Hague  
Physiol. behav.  
Physiol. Ecol. Japan  
Physiol. Zool.  
Physiologia Pl.  
Physis, B. Aires  
Phytochemistry  
Phytopathology  
Pl. Physiol., Lancaster  
Pl. Soil  
Plankt. Newsl.  
Planta  
Poeyana  
Pol. Archs Hydrobiol.  
Pol. Stud. Rev.  
Polar Biol.  
Polar Rec.  
Polar Res.  
Polska Akad. Nauk, Kom. Geofiz.  
Postilla  
Pr. Inst. Met. gospod. Wodnej  
Pr. morsk. Inst. ryb. Gdyni  
Problemy Arkt. Antarkt.  
Proc. a. Gulf Carib. Fish. Inst.  
Proc. a. Meet. Am. Soc. int. Law  
Proc. Acad. nat. Sci. Philad.  
Proc. Am. phil. Soc.  
Proc. biol. Soc. Wash.  
Proc. Calif. Acad. Sci.  
Proc. Egypt. Acad. Sci.  
Proc. Electron Microsc. Soc. Am.  
Proc. geol. Soc. China, Taiwan  
Proc. Gulf Carib. Fish. Inst.  
Proc. IEEE  
Proc. Indian Acad. Sci.  
Proc. Indian natn. Sci. Acad.  
Proc. int. Ass. theor. appl. Limnol.  
(Verh. int. Verein. theor. angew.)  
Proc. Japan Acad.



- Proc. K. ned. Akad. Wet.  
 Proc. La Acad. Sci.  
 Proc. Linn. Soc. N.S.W.  
 Proc. malac. Soc. Lond.  
 Proc. natn. Acad. Sci. U.S.A.  
 Proc. natn. Inst. Polar Res.  
 Proc. natn. Inst. Polar Res., Symp.  
   Polar Biol.  
 Proc. natn. Inst. Polar Res., Symp.  
   Polar Met. Glaciol.  
 Proc. natn. Shellfish. Ass.  
 Proc. Nova Scotian Inst. Sci.  
 Proc. Okla. Acad. Sci.  
 Proc. Pacif. Sci. Congr.  
 Proc. R. Inst. Gt Br.  
 Proc. R. Ir. Acad.  
 Proc. R. microsc. Soc.  
 Proc. R. Soc. Edinb.  
 Proc. R. Soc., Lond.  
 Proc. R. Soc. Qd  
 Proc. R. Soc. Vict.  
 Proc. U.S. natn. Mus.  
 Proc. U.S. nav. Inst.  
 Prof. Pap. U.S. geol. Surv.  
 Prog. analyt. Spectrosc.  
 Prog. Bot.  
 Prog. Geophys.  
 Prog. Oceanogr.  
 Prog. Opt.  
 Prog. phys. Geogr.  
 Prog. theor. Biol.  
 Progressive Fish-Culturist  
 Proj. Mer  
 Protistologica  
 Protok. FischTech.  
 Przegl. geofiz.  
 Przegl. zool.  
 PS Newsl. Am. polit. Sci. Ass.  
 Pubbl. Ist. sper. talassogr.  
 Pubbl. Staz. zool. Napoli  
 Publ. Ser. Neth. Inst. Sea Res.  
 Publicações Avulsas  
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 Publicações Inst. Zool. Dr. Augusto  
   Nobre  
 Public Admin. Rev.  
 Publico Serv. Hidrogr. nav., Argent.  
 Publner danske met. Inst.  
 Publnes especial. Inst. Cienc. Mar  
   Limnol., Univ. nac. Autón. Méx.  
 Publnes "INOCAR," Armada Ec-  
   uador, Inst. Oceanogr.  
 Publnes Inst. Biol. apl., Barcelona  
 Publnes Inst. Fomento Pesq.  
 Publs Am. Ass. Advmt Sci.  
 Publs Amakusa mar. biol. Lab.,  
   Kyushu Univ.
- Publs biol. Oceanogr. natn. Mus.  
   nat. Sci. (Can.)  
 Publs Bot. natn. Mus. nat. Sci., Can.  
 Publs Cent. natn. Exploit. Oceans,  
   CNEXO, Act. Colloq.  
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   CNEXO, Résult. Campgn. Mer  
 Publs Cent. natn. Exploit. Oceans,  
   CNEXO, Sér. Rapp. écon. jurid.  
 Publs Cent. natn. Exploit. Oceans,  
   CNEXO, Sér. Rapp. scient. tech.  
 Publs Finn. geod. Inst. (Suom. geod.  
   Lait. Julk.)  
 Publs Gt Lakes Res. Inst.  
 Publs Inst. mar. Sci. natn. Fish.  
   Univ., Busan  
 Publs Inst. mar. Sci. Univ. Tex.  
 Publs mar. Lab. Busan Fish. Coll.  
 Publs nat. Sci., natn. Mus. Can.  
 Publs Serv. Carte géol. Luxemb.  
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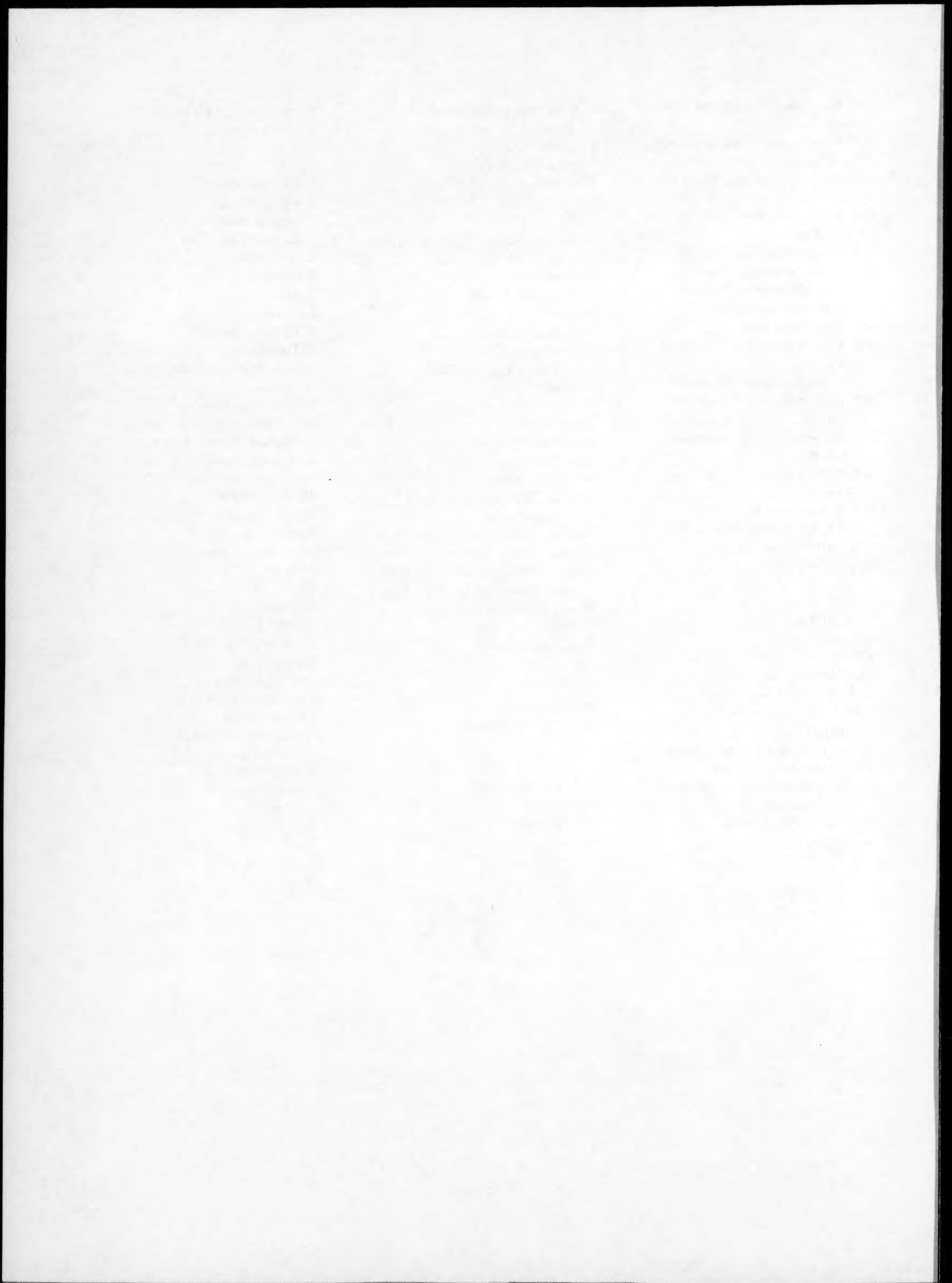
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## Subject Index (Notes)

**General principles.** A small number of very specific access terms (with accompanying non-searchable modifiers) is assigned to each document. The terms, drawn from the title or text, are rotated to generate the index entries.

A major emphasis is on proper geographic or physiographic names (e.g., Antarctic Bottom Water, Nares Abyssal Plain, Tyrrhenian Sea). Nearshore studies peculiar to one region might only be accessible under a country or continent name, although the name would then carry modifiers for more complete geographic and topical information. Additional spatial, zonal or environmental locators are frequently assigned to a document. Examples might include the terms mixed layer, troposphere, estuaries, fracture zones, and terms beginning with bottom-, surface-, or littoral-.

Another emphasis, when practicable, is on access terms that represent concrete, tangible or directly perceivable entities. Thus, phytoplankton might be assigned in preference to primary production, or seawater in preference to transparency, or sediments in preference to grain size. The less concrete words are freely used as modifiers, and they will frequently occur in the index as gathering points, or nodes, for cross-references to more specific terms, but generally will not collect many documents themselves, unless they are central to the paper's topic. In general, all processes (e.g., diagenesis), measured or calculated quantities (e.g., production), concepts (e.g., Evolution) and other abstractions are used as access terms only when they are the subject of a universal discussion rather than subsidiary to regional or other more concrete considerations.

A few non-English terms (Massif Central, gelbstoff) will occur in the index if thought to be appropriate.

**Hierarchies.** Only limited hierarchies have been constructed. Thus, a document on the Tyrrhenian Sea is not necessarily accessible under the Mediterranean Sea, nor a document concerned with the Tertiary period accessible under Cenozoic. But oceanic features (including bottom features) are built up to at least the name of a specific sea or gulf. Shallow water areas are built up through a terrestrial hierarchy to the name of a country (for the U.S. and Canada to the name of a state or province), or occasionally to the name of a major nearshore water body such as Mid-Atlantic Bight or Chesapeake Bay. Islands are built up to the name of an island group or the name of the

surrounding water body in the case of isolated islands. Geological periods and markers are built up to at least the name of an epoch, but events as old as the Precambrian are always accessible under that term. Specific cases are sometimes made accessible as general cases; for example, a document on the Kuroshio would also be generically accessible under the term currents provided that, for the paper in question, the Kuroshio was used to exemplify a more universal aspect of currents. Certain hierarchies, particularly taxonomic, may occur coincidentally because they are part of an original title; otherwise an attempt is made to build up the taxon in a title by one or two levels.

**Cross-references.** There is a cross-reference structure for many of the general terms. Cross-references that follow the phrase "see also" tend to be narrower terms, synonyms or near-synonyms. Cross-references that follow the phrase "more at" tend to be broader or more distantly related terms. A cross-reference which appears in capital letters contains either another list of cross-references under it, or, a list of documents that might well be highly relevant to the search. This can be so because two-word terms are frequently filed in both normal (specific) and inverted (general) forms. For example, plate tectonics is filed as plate tectonics, to juxtapose it with other plate- terms, and also as tectonics: plate, to juxtapose it with other tectonics-terms. It is the term tectonics which will have the cross-references to, e.g., neotectonics, seafloor spreading and subduction. Because the cross-references are made somewhat independently of the documents in the collection, a user could occasionally look up a cross-reference to find that the only entry is a reference back to the starting place.

**Search strategy.** Given the above, the following general rules apply to search strategy: (1) Select concrete or tangible terms insofar as practicable. (2) Build an appropriate set of broader and narrower terms, particularly for proper geographic or physiographic names, geological time periods, taxa and their common name equivalents; for the general terms, a systematic foray through the cross-references at this point is likely to be more useful than is their happenstance utilization after a search has begun. (3) Select both terrestrial and oceanic geographic names for nearshore areas. Finally, the searcher interested in a large set of documents that, regardless of individually specific or general natures, applies to a broad concept like tides or sediments might better search the appropriate headings of the bibliography itself. Suggestions regarding the index will always be appreciated.



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1991, Vol. 38(7-12), pp. 521-1054  
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- International Council for the Exploration of the Sea (Use ICES)**
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